

RECEIVED

APR - 6 1993

Vanguard
Communication Services, Inc.

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Paging

Two-way Radio

133 Ridgewood Drive
Mount Airy, NC 27030
919-719-2337 (BEEP)

RECEIVED

APR 5 1993

March 29, 1993

Federal Communications Commission
1919 M Street NW
Washington, DC 20554

FCC MAIL ROOM

RE: Comments Regarding NPRM PR Docket 92-235, "Spectrum Refarming"

I would like to respectfully submit the following comments in regard to the above proposal to "refarm" the frequency bands below 512 MHz. This is an extremely important issue in that it will have such a major impact upon almost everyone currently involved in the two-way radio field. The changes will ultimately be the most dramatic to ever occur in our

There are many rural areas where the population served does not warrant the large financial burden of constructing a large number of low-power, low-height transmitter sites, when one high-power, high elevation site will provide the same coverage at less cost. This concept applies to paging-only channels, as well as conventional two-way repeater channels. I certainly see the need to utilize only the transmitter power that is required to do the job, and I have always been in favor of that concept. But, as with any guideline there must be some degree of flexibility to cover areas in which this would present only an economic burden with no real-world gain in spectral efficiency.

I certainly favor the spectrum reuse approach in the large metro areas where crowding and congestion are most prevalent, but I see no way to justify the same "across the board" approach in the less densely populated rural areas. Certainly, there should be certain blocks of channels set aside for rural spectrum reuse (cellular, future PCS, etc.), however there should still remain a large block of channels to be used in these rural areas for wider-coverage single-site systems. Economics, again, demands that this option remain intact. As an example, I see nothing to be gained by forcing a rural operator to construct ten low-power sites on the same frequency to cover the same geographic area that could be covered by one high-power mountain-top site also using the same frequency.

What will become of the users presently utilizing high-power mountain-top sites for their communication needs? Will they be asked to spend millions of dollars to "come off of the hill" and invest in hundreds of new low-power sites just to provide their users with the same coverage area they had before? Who will be asked to pay the price for this undue burden? The ultimate answer will be either the consumer will have to absorb it, or in many cases the rural radio dealer and/or paging provider will be driven out of business because of the lack of revenue to invest millions of dollars on additional sites and equipment.

Part Two: Comments on Alternatives Available

I would like to formally suggest that PR Docket 92-235 be put on hold pending the outcome of "The Emerging Telecommunications Technologies Act of 1991" (H.R. 531/707, S. 218). This would allow for a much smoother transition to the new spectrally efficient technologies.

It has been stated that the refarming plan would provide for as many as 3200 additional channels by using narrowband technology. If we limit the analysis of this to 6.25 KHz slots, this gives a total bandwidth of 20 MHz to accommodate these new channels. My suggestion would be to use 20 MHz of spectrum obtained from the 200 MHz proposed to be returned from the federal government. This would be an excellent way to justify a "speedy" approval of this bill, and at the same time provide a space for the "transition to newer, narrowband technologies."

This plan would solve ALL of the current problems facing the refarming issue. First, it would provide the much-needed spectrum for our large metro areas, and second, it would serve as a proving-ground for manufacturers to introduce large volumes of narrowband equipment. As more and more users move to these new frequencies to free themselves from congested channels this will have a two-fold effect. The "old" channels will become less crowded due to vacancies created by those who relocate, and the increasing volume of "new" equipment purchases will help to drive the prices down as the manufacturers recoup their engineering investment sooner. As prices continue to fall this will provide an even greater incentive to move to the new narrowband channels.

Over a period of five to ten years the "vacated" Part 90 channels could slowly be converted to narrowband "Part 88" rules as required. I would think that this should be done on a geographic basis rather than on an "across the board" approach. In this way, the areas that need spectrum the most (larger MSA's) would have it available, and the areas that are not in need of large blocks of additional spectrum (rural areas) would not be "forced" to make a change when it's not necessary or practical.

The emergency coordination would need to implement mobile operation



I realize that my above suggestions are not as simple as what I have